GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 19, 2003, 14:27:18 ; Search time 247 Seconds
(without alignments)
218.578 Million cell updates/sec

Title: US-09-758-881-115
Perfect score: 20
Sequence: 1 gctccagcatctgctgcttc 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2552756 seqs, 1349719017 residues

Total number of hits satisfying chosen parameters: 2101872

Minimum DB seq length: 0
Maximum DB seq length: 30

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_19Jun03:*
1: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
2: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
3: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
4: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
5: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1984.DAT:*
6: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
7: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
8: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1987.DAT:*
9: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1988.DAT:*
10: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*
11: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1990.DAT:*
12: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*
13: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
14: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
15: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1994.DAT:*
16: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
17: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*
18: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
19: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
20: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:*
21: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2000.DAT:*
22: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2001A.DAT:*
23: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
24: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*
25: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2003.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	21	AAC93264	Human STAT3 phosph
2	20	100.0	20	24	AAS96881	Human STAT3 antise
3	18.4	92.0	20	21	AAC93236	Mouse STAT3 phosph
4	18.4	92.0	20	24	AAS96853	Mouse STAT3 antise
5	18	90.0	20	21	AAC93172	Human STAT3 phosph
6	18	90.0	20	24	AAS96789	Human STAT3 antise
7	15.2	76.0	21	19	AAZ26192	Human polymorphic
c 8	15.2	76.0	24	14	AAQ48649	Control mRNA prepr
c 9	15.2	76.0	24	25	ABX89728	Interleukin 2.15 s
c 10	14.8	74.0	19	24	ABN88070	Caenorhabditis ele
11	14.8	74.0	21	19	AAZ26191	Human polymorphic
c 12	14.2	71.0	20	25	ABS58313	Silkworm spider dr
13	14.2	71.0	24	20	AAZ34203	Human PRO865 PCR r
14	14.2	71.0	24	21	AAC78819	Human PRO541 rever
15	14.2	71.0	24	25	ABX92575	Human PRO DNA PCR
16	14.2	71.0	25	22	AAF79936	PCR primer used to
c 17	14.2	71.0	25	25	ABT33462	NOV probe SEQ ID N
18	14.2	71.0	26	24	ABA99704	M. cerevisiae 16S
c 19	14.2	71.0	30	19	AAV21292	Mus musculus I-mfa
c 20	13.8	69.0	20	24	ABK91026	Real time PCR prim
c 21	13.8	69.0	20	24	ABK14463	Human insulin anti
c 22	13.8	69.0	20	25	ABZ77623	PCR primer used to
c 23	13.8	69.0	21	18	AAV01224	Insulin PCR primer
24	13.8	69.0	21	19	AAZ26190	Human polymorphic
c 25	13.8	69.0	23	14	AAQ37438	Primer VH3a. Synt
26	13.8	69.0	24	20	AAZ18325	Primer for homeobo
27	13.6	68.0	22	21	AAA64532	PCR primer G2 used
28	13.6	68.0	24	19	AAV42614	PCR primer used to
29	13.6	68.0	24	24	AAD22670	Human ceramidase c
30	13.6	68.0	26	21	AAA97055	PCR primer G5-11 f
c 31	13.6	68.0	27	24	AAD31720	Human tumour suppr
32	13.6	68.0	30	20	AAX24361	ATP-phosphoribosyl
33	13.4	67.0	20	22	AAC92583	Human nucleolin ph
34	13.4	67.0	20	24	ABK99820	Mouse RAIDD antise
35	13.4	67.0	20	24	ABK99821	Mouse RAIDD antise
36	13.4	67.0	22	23	ABK52194	Calothrix P2 PCR p
c 37	13.4	67.0	23	18	AAT85350	Spider silk protei
38	13.2	66.0	20	18	AAT69656	Tumour suppressor
c 39	13.2	66.0	20	18	AAT69664	Tumour suppressor
c 40	13.2	66.0	20	19	AAV62303	ING1 gene PCR prim
41	13.2	66.0	20	19	AAV62295	ING1 gene PCR prim
c 42	13.2	66.0	20	20	AAX28689	Nucleotide sequenc
c 43	13.2	66.0	20	22	AAK95232	Human cDNA clone-s
44	13.2	66.0	20	22	AAF58473	rpoA gene PCR prim
45	13.2	66.0	20	24	ABI95396	Capture oligonucle

ALIGNMENTS

RESULT 1
AAC93264
ID AAC93264 standard; DNA; 20 BP.
XX
AC AAC93264;
XX
DT 15-FEB-2001 (first entry)
XX
DE Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:115.
XX
KW Human; mouse, STAT3, phosphorothioate; antisense oligonucleotide;
KW modulation; signal transducer and activator of transcription;
KW DNA-binding protein; signal transduction; inhibition; apoptosis;
KW inflammatory disease; cancer; antiinflammatory; antirheumatic;
KW cytostatic; immunostimulatory; rheumatoid arthritis; leukaemia;
KW myeloma; melanoma; lymphoma; diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO200061602-A1.
XX
PD 19-OCT-2000.
XX
PF 06-APR-2000; 2000WO-US09054.
XX
PR 08-APR-1999, 99US 0288461.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Karras JG;
XX

DR WPI; 2000-619223/59.
XX
PT New antisense compound for inhibiting the expression of signal
PT transducer and activator of transcription 3 (STAT3) in cells or tissues
PT and treating diseases or condition associated with STAT3, such as
PT rheumatoid arthritis and cancer -
XX
PS Example 12; Page 63; 104pp; English.
XX
CC The present invention describes an antisense compound (I), 8 to 30
CC nucleobases in length, that is targeted to a nucleic acid molecule
CC encoding STAT3 (Signal Transducer and Activator of Transcription) and
CC which inhibits the expression of it. (I) has antiinflammatory,
CC antirheumatic, cytostatic and immunostimulatory activities. (I) is used
CC for inhibiting the expression of STAT3 in cells or tissues, treating
CC an animal having a disease or condition associated with STAT3 or a
CC human having a disease or condition characterised by a reduction in
CC apoptosis, and inducing apoptosis in a cell. Diseases or conditions
CC that are treated are rheumatoid arthritis, cancer of the breast,
CC prostate, brain, head and/or neck, leukaemia, myeloma, melanoma or
CC lymphoma. (I) can also be used for diagnostic methods in detecting and
CC determining the role of STAT3 in various cell functions, physiological
CC processes and conditions and for diagnosing the conditions associated
CC with expression of STAT3. (I) can be used alone or with other drugs as
CC an immunostimulator. (I) is used in sandwich and colourimetric assays,
CC involving enzyme conjugation and radiolabeling and is used in
CC diagnostic kits. AAC93150 encodes human STAT3 and AAC93231 encodes mouse
CC STAT3 as given in the exemplification of the present invention. AAC93151
CC to AAC93230 and AAC93232 to AAC93299 represent STAT3 phosphorothioate
CC antisense oligonucleotides, and AAC93300 represents a mismatch control
CC oligonucleotide which are used in example from the present invention.
XX
SQ Sequence 20 BP, 2 A, 8 C, 4 G, 6 T, 0 other;

Query Match 100.0%; Score 20; DB 21; Length 20;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCTCCAGCATCTGCTGCTTC 20
||||||||||||||||||||
Db 1 GCTCCAGCATCTGCTGCTTC 20

RESULT 2
AAS96881
ID AAS96881 standard; DNA; 20 BP.
XX
AC AAS96881;
XX
DT 26-FEB-2002 (first entry)
XX
DE Human STAT3 antisense phosphorothioate oligodeoxynucleotide #88.
XX
KW STAT3; human; signal transducer and activator of transcription; ss; STAT;
KW antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;
KW autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;
KW neck; brain; leukaemia; myeloma, melanoma; lymphoma, apoptosis,
KW antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;
KW cytostatic.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN US2001029250-A1.
XX
PD 11-OCT-2001.
XX
PF 11-JAN-2001; 2001US-0758881.
XX
PR 08-APR-1999; 99US-0288461.
PR 06-APR-2000; 2000WO-US09054.
XX
PA (KARR/) KARRAS J G.
XX
PI Karras JG;
XX
DR WPI; 2002-009991/01.
XX
PT Novel antisense compound useful for treating and diagnosing
PT inflammatory diseases and cancers, is targeted to a nucleic acid
PT molecule encoding signal transducer and activator of transcription
PT proteins -
XX
PS Example 12; Page 18, 21pp, English.
XX
CC The invention relates to antisense compounds targeted to a nucleic acid
CC molecule encoding a signal transducer and activator of transcription
CC (STAT) protein, specifically STAT3, where the antisense compounds inhibit
CC the expression of STAT3. The antisense sequences are useful for
CC inhibiting the expression of STAT3 in cells or tissues, inducing
CC Fas-mediated apoptosis in cells, and sensitising cells to apoptosis. They
CC are also useful for treating an animal having a disease or condition
CC associated with STAT3. These disorders include inflammatory or autoimmune
CC disease, particularly rheumatoid arthritis, cancers, such as those of the
CC breast, prostate, brain and head and neck and leukaemias, myelomas,
CC melanomas and lymphomas. Also treatable are human diseases or conditions
CC characterised by a reduction in apoptosis or an insensitivity to
CC apoptotic signals. The sequences of the invention can be used in clinical
CC research, for detecting and determining the role of STAT3 in various cell
CC functions and physiological processes and for diagnosing conditions
CC associated with the expression of STAT3. The sequences represent cDNA
CC encoding human STAT3 and human STAT3 oligonucleotides
XX
SQ Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 other;

Query Match 100.0%; Score 20; DB 24; Length 20;
Best Local Similarity 100.0%; Pred. No. 35;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCTCCAGCATCTGCTGCTTC 20
||||||||||||||||||||
Db 1 GCTCCAGCATCTGCTGCTTC 20

RESULT 3
AAC93236
ID AAC93236 standard; DNA; 20 BP.
XX
AC AAC93236;
XX
DT 15-FEB-2001 (first entry)
XX
DE Mouse STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:87.
XX
KW Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;
KW modulation; signal transducer and activator of transcription;
KW DNA-binding protein; signal transduction; inhibition; apoptosis;
KW inflammatory disease, cancer, antiinflammatory, antirheumatic;
KW cytostatic; immunostimulatory; rheumatoid arthritis; leukaemia;
KW myeloma, melanoma, lymphoma; diagnosis, ss.
XX
OS Mus musculus.
XX
PN WO200061602-A1.
XX
PD 19-OCT-2000.
XX
PF 06-APR-2000; 2000WO-US09054.
XX
PR 08-APR-1999; 99US-0288461.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Karras JG;
XX
DR WPI; 2000-619223/59.

```
XX
PT   New antisense compound for inhibiting the expression of signal
PT   transducer and activator of transcription 3 (STAT3) in cells or tissues
PT   and treating diseases or condition associated with STAT3, such as
PT   rheumatoid arthritis and cancer -
XX
PS   Example 3; Page 54; 104pp; English.
XX
CC   The present invention describes an antisense compound (I), 8 to 30
CC   nucleobases in length, that is targeted to a nucleic acid molecule
CC   encoding STAT3 (Signal Transducer and Activator of Transcription) and
CC   which inhibits the expression of it. (I) has antiinflammatory,
CC   antirheumatic, cytostatic and immunostimulatory activities. (I) is used
CC   for inhibiting the expression of STAT3 in cells or tissues, treating
CC   an animal having a disease or condition associated with STAT3 or a
CC   human having a disease or condition characterised by a reduction in
CC   apoptosis, and inducing apoptosis in a cell. Diseases or conditions
CC   that are treated are rheumatoid arthritis, cancer of the breast,
CC   prostate, brain, head and/or neck, leukaemia, myeloma, melanoma or
CC   lymphoma. (I) can also be used for diagnostic methods in detecting and
CC   determining the role of STAT3 in various cell functions, physiological
CC   processes and conditions and for diagnosing the conditions associated
CC   with expression of STAT3. (I) can be used alone or with other drugs as
CC   an immunostimulator. (I) is used in sandwich and colourimetric assays,
CC   involving enzyme conjugation and radiolabeling and is used in
CC   diagnostic kits. AAC93150 encodes human STAT3 and AAC93231 encodes mouse
CC   STAT3 as given in the exemplification of the present invention. AAC93151
CC   to AAC93230 and AAC93232 to AAC93299 represent STAT3 phosphorothioate
CC   antisense oligonucleotides, and AAC93300 represents a mismatch control
CC   oligonucleotide which are used in example from the present invention.
XX
SQ   Sequence 20 BP, 3 A, 8 C, 3 G, 6 T, 0 other,

  Query Match             92.0%;  Score 18.4;  DB 21;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.6e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCTTC 20
              |||||| ||||||||||||
Db          1 GCTCCAACATCTGCTGCTTC 20


RESULT 4
AAS96853
ID   AAS96853 standard; DNA; 20 BP.
XX
AC   AAS96853;
XX
DT   26-FEB-2002  (first entry)
XX
DE   Mouse STAT3 antisense phosphorothioate oligodeoxynucleotide #5.
XX
KW   STAT3, mouse; signal transducer and activator of transcription; ss; STAT;
KW   antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;
KW   autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;
KW   neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis;
KW   antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;
KW   cytostatic.
XX
OS   Mus musculus
OS   Synthetic.
XX
PN   US2001029250-A1.
XX
PD   11-OCT-2001.
XX
PF   11-JAN-2001; 2001US-0758881.
XX
PR   08-APR-1999;   99US-0288461.
PR   06-APR-2000; 2000WO-US09054.
XX
PA   (KARR/) KARRAS J G
XX
PI   Karras JG;
XX
DR   WPI; 2002-009991/01.
XX
PT   Novel antisense compound useful for treating and diagnosing
PT   inflammatory diseases and cancers, is targeted to a nucleic acid
PT   molecule encoding signal transducer and activator of transcription
PT   proteins -
XX
PS   Example 3; Page 15; 21pp; English.
XX
CC   The invention relates to antisense compounds targeted to a nucleic acid
CC   molecule encoding a signal transducer and activator of transcription
CC   (STAT) protein, specifically STAT3, where the antisense compounds inhibit
CC   the expression of STAT3. The antisense sequences are useful for
CC   inhibiting the expression of STAT3 in cells or tissues, inducing
CC   Fas-mediated apoptosis in cells, and sensitising cells to apoptosis. They
CC   are also useful for treating an animal having a disease or condition
CC   associated with STAT3. These disorders include inflammatory or autoimmune
CC   disease, particularly rheumatoid arthritis, cancers, such as those of the
CC   breast, prostate, brain and head and neck and leukaemias, myelomas,
CC   melanomas and lymphomas. Also treatable are human diseases or conditions
CC   characterised by a reduction in apoptosis or an insensitivity to
CC   apoptotic signals. The sequences of the invention can be used in clinical
CC   research, for detecting and determining the role of STAT3 in various cell
CC   functions and physiological processes and for diagnosing conditions
CC   associated with the expression of STAT3. The sequences represent cDNA
CC   encoding mouse STAT3 and mouse STAT3 oligonucleotides.
XX
SQ   Sequence 20 BP, 3 A, 8 C, 3 G, 6 T, 0 other,

  Query Match             92.0%;  Score 18.4;  DB 24;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.6e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCTTC 20
              |||||| ||||||||||||
Db          1 GCTCCAACATCTGCTGCTTC 20


RESULT 5
AAC93172
ID   AAC93172 standard; DNA; 20 BP.
XX
AC   AAC93172;
XX
DT   15-FEB-2001  (first entry)
XX
DE   Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:23.
XX
KW   Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;
KW   modulation; signal transducer and activator of transcription;
KW   DNA-binding protein; signal transduction; inhibition; apoptosis;
KW   inflammatory disease; cancer; antiinflammatory; antirheumatic;
KW   cytostatic; immunostimulatory; rheumatoid arthritis; leukaemia;
KW   myeloma; melanoma; lymphoma; diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061602-A1.
XX
PD   19-OCT-2000.
XX
PF   06-APR-2000; 2000WO-US09054.
XX
PR   08-APR-1999;   99US-0288461.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG;
XX
DR   WPI; 2000-619223/59.
XX
```

```
PT   New antisense compound for inhibiting the expression of signal
PT   transducer and activator of transcription 3 (STAT3) in cells or tissues
PT   and treating diseases or condition associated with STAT3, such as
PT   rheumatoid arthritis and cancer -
XX
PS   Example 2; Page 46; 104pp; English.
XX
CC   The present invention describes an antisense compound (I), 8 to 30
CC   nucleobases in length, that is targeted to a nucleic acid molecule
CC   encoding STAT3 (Signal Transducer and Activator of Transcription) and
CC   which inhibits the expression of it. (I) has antiinflammatory,
CC   antirheumatic, cytostatic and immunostimulatory activities. (I) is used
CC   for inhibiting the expression of STAT3 in cells qr tissues, treating
CC   an animal having a disease or condition associated with STAT3 or a
CC   human having a disease or condition characterised by a reduction in
CC   apoptosis, and inducing apoptosis in a cell. Diseases or conditions
CC   that are treated are rheumatoid arthritis, cancer of the breast,
CC   prostate, brain, head and/or neck, leukaemia, myeloma, melanoma or
CC   lymphoma. (I) can also be used for diagnostic methods in detecting and
CC   determining the role of STAT3 in various cell functions, physiological
CC   processes and conditions and for diagnosing the conditions associated
CC   with expression of STAT3. (I) can be used alone or with other drugs as
CC   an immunostimulator. (I) is used in sandwich and colourimetric assays,
CC   involving enzyme conjugation and radiolabeling and is used in
CC   diagnostic kits. AAC93150 encodes human STAT3 and AAC93231 encodes mouse
CC   STAT3 as given in the exemplification of the present invention. AAC93151
CC   to AAC93230 and AAC93232 to AAC93299 represent STAT3 phosphorothioate
CC   antisense oligonucleotides, and AAC93300 represents a mismatch control
CC   oligonucleotide which are used in example from the present invention.
XX
SQ   Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 other;

  Query Match             90.0%;  Score 18;  DB 21;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCT 18
              ||||||||||||||||||
Db          3 GCTCCAGCATCTGCTGCT 20


RESULT 6
AAS96789
ID   AAS96789 standard; DNA; 20 BP.
XX
AC   AAS96789;
XX
DT   26-FEB-2002  (first entry)
XX
DE   Human STAT3 antisense phosphorothioate oligodeoxynucleotide #22.
XX
KW   STAT3; human; signal transducer and activator of transcription; ss; STAT;
KW   antisense gene therapy; Fas-mediated apoptosis; inflammatory disease;
KW   autoimmune disease; rheumatoid arthritis; cancer; breast; prostate; head;
KW   neck; brain; leukaemia, myeloma; melanoma; lymphoma; apoptosis;
KW   antiinflammatory; immunosuppressive; antirheumatic; antiarthritic;
KW   cytostatic.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   US2001029250-A1.
XX
PD   11-OCT-2001.
XX
PF   11-JAN-2001; 2001US-0758881.
XX
PR   08-APR-1999;   99US-0288461.
PR   06-APR-2000; 2000WO-US09054.
XX
PA   (KARR/) KARRAS J G
XX
PI   Karras JG;
XX
DR   WPI; 2002-009991/01.
XX
PT   Novel antisense compound useful for treating and diagnosing
PT   inflammatory diseases and cancers, is targeted to a nucleic acid
PT   molecule encoding signal transducer and activator of transcription
PT   proteins -
XX
PS   Example 2; Page 13; 21pp; English.
XX
CC   The invention relates to antisense compounds targeted to a nucleic acid
CC   molecule encoding a signal transducer and activator of transcription
CC   (STAT) protein, specifically STAT3, where the antisense compounds inhibit
CC   the expression of STAT3. The antisense sequences are useful for
CC   inhibiting the expression of STAT3 in cells or tissues, inducing
CC   Fas-mediated apoptosis in cells, and sensitising cells to apoptosis. They
CC   are also useful for treating an animal having a disease or condition
CC   associated with STAT3. These disorders include inflammatory or autoimmune
CC   disease, particularly rheumatoid arthritis, cancers, such as those of the
CC   breast, prostate, brain and head and neck and leukaemias, myelomas,
CC   melanomas and lymphomas. Also treatable are human diseases or conditions
CC   characterised by a reduction in apoptosis or an insensitivity to
CC   apoptotic signals. The sequences of the invention can be used in clinical
CC   research, for detecting and determining the role of STAT3 in various cell
CC   functions and physiological processes and for diagnosing conditions
CC   associated with the expression of STAT3. The sequences represent cDNA
CC   encoding human STAT3 and human STAT3 oligonucleotides.
XX
SQ   Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 other;

  Query Match             90.0%;  Score 18;  DB 24;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCT 18
              ||||||||||||||||||
Db          3 GCTCCAGCATCTGCTGCT 20


RESULT 7
AAZ26192
ID   AAZ26192 standard; DNA; 21 BP.
XX
AC   AAZ26192;
XX
DT   30-NOV-1999  (first entry)
XX
DE   Human polymorphic region 381.
XX
KW   Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW   cell viability; loss of heterozygosity; precancerous condition; ASI;
KW   allele specific inhibitor; somatic cell; diagnosis; prevention;
KW   atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW   dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW   graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS   Homo sapiens.
XX
PN   WO9841648-A2.
XX
PD   24-SEP-1998.
XX
PF   19-MAR-1998;   98WO-US05419.
XX
PR   20-MAR-1997;   97US-0041057.
XX
PA   (VARI-) VARIAGENICS INC.
XX
PI   Housman D,  Ledley FD,  Stanton VP;
XX
DR   WPI; 1998-521232/44.
XX
PT   Identifying target genes for allele-specific drugs - used for
```

```
PT   diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic
PT   plaque, dysplastic lesions, endometriosis or graft versus host disease
XX
PS   Disclosure; Figure 7; 605pp; English.
XX
CC   This invention describes a novel method for identifying an inhibitor
CC   potentially useful for treatment of cancer, where the inhibitor is
CC   active on a gene vital for cell growth or viability, and where the gene
CC   is subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC   used for preventing the development of cancer in a patient having a
CC   precancerous condition, by administering to the patient a first allele
CC   specific inhibitor (ASI) targeted to an allele of a first essential gene
CC   present in cells of the precancerous condition, where the normal somatic
CC   cells of the patient are heterozygous for the first gene, the inhibitor
CC   is active on at least one but less than all allelic forms of the gene
CC   present in a population and targets only one allelic form present in the
CC   normal somatic cells, and the first gene. The products and methods can
CC   be used in the diagnosis, prevention and treatment of LOH disorders,
CC   e.g. cancers, atherosclerotic plaques, premalignant metaplastic or
CC   dysplastic lesions, benign tumours, endometriosis, polycystic kidney
CC   disease, and graft versus host disease. The method can also be used to
CC   remove malignant cells from bone marrow transplants. AAZ25812-226825
CC   represent human polymorphic sites described in the method of the
CC   invention.
XX
SQ   Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 other;

  Query Match             76.0%;  Score 15.2;  DB 19;  Length 21;
  Best Local Similarity   85.0%;  Pred. No. 3.4e+03;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCTTC 20
              ||||||||| ||| |||| |
Db          2 GCTCCAGCAGCTGGTGCTCC 21


RESULT 8
AAQ48649/c
ID   AAQ48649 standard; DNA; 24 BP.
XX
AC   AAQ48649;
XX
DT   25-MAR-2003  (updated)
DT   22-FEB-1994  (first entry)
XX
DE   Control mRNA preproinsulin 3' antisense PCR primer.
XX
KW   Polymerase chain reaction; amplification; detection;
KW   activation association transcripts; mRNA phenotyping; exon;
KW   different; hybridisation; identification; ss.
XX
OS   Synthetic.
XX
PN   WO9317043-A1.
XX
PD   02-SEP-1993.
XX
PF   01-MAR-1993;   93WO-US01768.
XX
PR   28-FEB-1992;   92US-0843731.
XX
PA   (BETH-) BETH ISRAEL HOSPITAL ASSOC.
PA   (BGHM ) BRIGHAM & WOMENS HOSPITAL.
XX
PI   Libermann T,  Rubin-Kelley VE,  Strom T;
XX
DR   WPI; 1993-288360/36.
XX
PT   New protein with immunosuppressive activity - obtd. from cloned
PT   anergic T-cells, used for treating auto:immune diseases and
PT   transplant rejection
XX
PS   Disclosure; Page 43; 67pp; English.
XX
CC   The sequence is that of a preproinsulin 3' antisense PCR primer
CC   (nucleotides 1931-1907) which was used as a control in mRNA phenotyping
CC   as part of the identification of activation associated transcripts.
CC   The PCR was performed as part of the isolation of DNA encoding a novel
CC   immunosuppressive protein. This nucleic acid can be used to alter
CC   the effect of IL-2 or IL-4 on their receptor-bearing cells in a mammal.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 24 BP; 5 A; 3 C; 12 G; 4 T; 0 other;

  Query Match             76.0%;  Score 15.2;  DB 14;  Length 24;
  Best Local Similarity   85.0%;  Pred. No. 3.4e+03;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCTTC 20
              || |||||||||||| | ||
Db         24 GCACCAGCATCTGCTCCCTC 5


RESULT 9
ABX89728/c
ID   ABX89728 standard; DNA; 24 BP.
XX
AC   ABX89728;
XX
DT   08-MAY-2003  (first entry)
XX
DE   Interleukin 2.15 suppression factor associated polynucleotide #30.
XX
KW   Human; ds; transplanted tissue rejection inhibition; multiple sclerosis;
KW   diabetes; systemic lupus erythematosus; rheumatoid arthritis; IL-2.15;
KW   interleukin 2.15 suppression factor; local immunosuppression;
KW   destructive autoimmune response inhibition; gene therapy;
KW   allograft rejection inhibition; xenograft rejection inhibition;
KW   interleukin 2 modulation; interleukin 4 modulation; heart transplant;
KW   kidney transplant; liver transplant; lung transplant; bone transplant;
KW   skin transplant; cellular transplant; islet transplant.
XX
OS   Homo sapiens.
XX
PN   US2002164311-A1.
XX
PD   07-NOV-2002.
XX
PF   12-MAR-2001; 2001US-0804717.
XX
PR   11-JUL-1994;   94US-0273402.
PR   28-FEB-1992;   92US-0843731.
PR   01-MAR-1993;   93US-0024569.
XX
PA   (BETH-) BETH ISRAEL HOSPITAL ASSOC.
XX
PI   Storm TB,  Libermann T;
XX
DR   WPI; 2003-246664/25.
XX
PT   Inhibiting rejection of transplanted tissue, comprises introducing DNA
PT   encoding immunosuppressive polypeptide or glycosidase into the cell, so
PT   that the polypeptide is expressed close enough to the tissue to inhibit
PT   rejection -
XX
PS   Disclosure; Page 24; 45pp; English.
XX
CC   The invention relates to a method of inhibiting rejection of transplanted
CC   tissue in a mammal which comprises introducing into a cell, either in
CC   vivo or ex vivo, DNA encoding immunosuppressive polypeptide or
CC   glycosidase, and if it is ex vivo, transplanting the cell into mammal,
CC   where expression of polypeptide is regulated by DNA, so that the
CC   polypeptide is expressed close enough to transplanted tissue to inhibit
CC   rejection. The method also involves inhibiting a destructive autoimmune
CC   response, by introducing into a cell, either in vivo or ex vivo, DNA
CC   encoding an immunosuppressive polypeptide. The polynucleotide is useful
```

CC for altering the effect of interleukin 2 (IL-2)/ interleukin 4 (IL-4) on
CC an IL-2/IL-4 receptor-bearing cell in a mammal, by transfecting the cell
CC with the polynucleotide, so that cell expresses the protein. The method
CC is useful for inhibiting rejection of a transplanted tissue and also for
CC inhibiting destructive autoimmune response in a mammal, where the mammal
CC is a mammal with rheumatoid arthritis, has diabetes caused by an
CC autoimmune response, is presymptomatic with systemic lupus erythematosus,
CC or with multiple sclerosis. The method is also is useful for inhibiting
CC rejection of both allografts and xenografts e.g. transplanted organs such
CC as heart, kidney, liver and lung and tissues such as bone and skin or
CC cellular transplants e.g. islets and also for decreasing autoimmune
CC damage to the above mentioned organs. The method allows strong local
CC immunosuppression without the side effects associated with general
CC immunosuppressive methods. The present sequence represents an interleukin
CC 2.15 (IL-2.15) suppression factor associated polynucleotide.
CC Note: The DNA sequence presented is not disclosed in the specification
CC but is shown in the sequence listing.
XX
SQ Sequence 24 BP; 5 A; 3 C; 12 G; 4 T; 0 other;

Query Match 76.0%; Score 15.2; DB 25; Length 24;
Best Local Similarity 85.0%; Pred. No. 3.4e+03;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GCTCCAGCATCTGCTGCTTC 20
|| |||||||||||| | ||
Db 24 GCACCAGCATCTGCTCCCTC 5

RESULT 10
ABN88070/c
ID ABN88070 standard; DNA; 19 BP.
XX
AC ABN88070;
XX
DT 12-AUG-2002 (first entry)
XX
DE Caenorhabditis elegans related dsRNA2 upstream primer.
XX
KW Caenorhabditis elegans; C. elegans; reproduction; development;
KW antinematode; nematocide; plant protectant; gene therapy; infection;
KW calabar swelling; lymphatic filariasis; elephantiasis; onchocercoma;
KW primer; ss.
XX
OS Caenorhabditis elegans.
OS Synthetic.
XX
PN WO200238600-A2.
XX
PD 16-MAY-2002.
XX
PF 09-NOV-2001; 2001WO-EP13038.
XX
PR 09-NOV-2000; 2000US-246721P.
XX
PA (CENI-) CENIX BIOSCIENCE GMBH.
XX
PI Echeverri C, Goenczy P, Hyman A, Coulson A, Jones S, Oegema K;
PI Kirkham M;
XX
DR WPI; 2002-471547/50.
XX
PT New Caenorhabditis elegans genes required for viability, growth or
PT reproduction of nematodes, useful for diagnosing or treating e.g.
PT onchocercoma or elephantiasis in humans or animals, or plant diseases
PT caused by e.g. Heterodera -
XX
PS Example 2; Page 28; 35pp, English.
XX
CC The present invention describes an isolated nucleic acid molecule (I),
CC which encodes a polypeptide (II) required for the viability and/or growth
CC and/or reproduction of nematodes (Caenorhabditis elegans), or its
CC fragment. (I) and (II) have nematocide and plant protectant activities,
CC and can be used in gene therapy. (I) is useful for producing (II)
CC required for the viability, growth and/or reproduction of nematodes.
CC Nucleic acids, probes, polypeptides, fusion proteins and antibodies from
CC the present invention are also useful in a screening assay for
CC interacting drugs that inhibit, stimulate or affect worm growth,
CC viability or reproduction. They are useful for diagnosing or treating
CC human or animal diseases associated with the infection or presence of
CC nematode worms, e.g. Wucheria bacrofti, Brugia malayi, Loa loa or
CC Onchocerca volvulus. These diseases include calabar swellings, lymphatic
CC filariasis (elephantiasis) or onchocercoma. The nucleic acids, probes,
CC polypeptides, fusion proteins and antibodies are also useful for
CC diagnosing or treating plant diseases associated with the infection or
CC presence of nematode worms. Furthermore, the nucleic acid and amino
CC acid sequences are useful for developing computational models, structural
CC models or other models for evaluating drug binding and efficacy. The
CC present sequence represents a primer which is used in an example from
CC the present invention in RNAi experiments.
XX
SQ Sequence 19 BP; 6 A; 3 C; 7 G; 3 T; 0 other;

Query Match 74.0%; Score 14.8; DB 24; Length 19;
Best Local Similarity 88.9%; Pred. No. 4.9e+03;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 TCCAGCATCTGCTGCTTC 20
|||||||||||||| || |
Db 18 TCCAGCATCTGCTTCTGC 1

RESULT 11
AAZ26191
ID AAZ26191 standard; DNA; 21 BP.
XX
AC AAZ26191;
XX
DT 30-NOV-1999 (first entry)
XX
DE Human polymorphic region 380.
XX
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN WO9841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US05419.
XX
PR 20-MAR-1997; 97US-0041057.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman D, Ledley FD, Stanton VP;
XX
DR WPI; 1998-521232/44.
XX
PT Identifying target genes for allele-specific drugs - used for
PT diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic
PT plaque, dysplastic lesions, endometriosis or graft versus host disease
XX
PS Disclosure; Figure 7; 605pp; English.
XX
CC This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is
CC active on a gene vital for cell growth or viability, and where the gene
CC is subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a

```
CC   precancerous condition, by administering to the patient a first allele
CC   specific inhibitor (ASI) targeted to an allele of a first essential gene
CC   present in cells of the precancerous condition, where the normal somatic
CC   cells of the patient are heterozygous for the first gene, the inhibitor
CC   is active on at least one but less than all allelic forms of the gene
CC   present in a population and targets only one allelic form present in the
CC   normal somatic cells, and the first gene. The products and methods can
CC   be used in the diagnosis, prevention and treatment of LOH disorders,
CC   e.g. cancers, atherosclerotic plaques, premalignant metaplastic or
CC   dysplastic lesions, benign tumours, endometriosis, polycystic kidney
CC   disease, and graft versus host disease. The method can also be used to
CC   remove malignant cells from bone marrow transplants. AAZ25812-Z26825
CC   represent human polymorphic sites described in the method of the
CC   invention.
XX
SQ   Sequence 21 BP; 2 A; 8 C; 6 G; 5 T; 0 other;

  Query Match             74.0%;  Score 14.8;  DB 19;  Length 21;
  Best Local Similarity   88.9%;  Pred. No. 5e+03;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          1 GCTCCAGCATCTGCTGCT 18
              ||||||||| ||| ||||
Db          4 GCTCCAGCAGCTGGTGCT 21


RESULT 12
ABS58313/c
ID   ABS58313 standard; DNA; 20 BP.
XX
AC   ABS58313;
XX
DT   21-FEB-2003  (first entry)
XX
DE   Silkworm spider dragline silk gene (MaSP1) specific PCR primer #1.
XX
KW   Silkworm; primer; ss; spider drag-line; silk; fibroin; PCR;
KW   light chain; L chain; MaSP1.
XX
OS   Bombyx mori.
XX
PN   US2002137211-A1.
XX
PD   26-SEP-2002.
XX
PF   04-OCT-2001; 2001US-0969852.
XX
PR   02-JAN-2001; 2001CN-0106406.
XX
PA   (UYSI-) UNIV SICHUAN TIANYOU BIOLOGIC ENG CO LTD.
XX
PI   Liu T,  Liu H,  Li W,  Zhao L;
XX
DR   WPI; 2003-110604/10.
XX
PT   Establishing expression systems of spider drag-line silk genes in
PT   silkworms, by fusing silkworm fibroin L-chain cDNA and its promoter
PT   upstream of spider drag-line silk gene cDNA to direct drag-line protein
PT   expression and secretion -
XX
PS   Example 1; Page 2; 19pp; English.
XX
CC   This invention relates to a novel method for establishing an expression
CC   system of spider drag-line silk genes in silkworm by fusing the silkworm
CC   fibroin L-chain cDNA and its promoter upstream of the spider drag-line
CC   silk gene cDNA, ligating the fused gene with a reporter gene and
CC   inserting into a transposon to obtain a recombinant transposon which
CC   can be used to transform a silkworm egg. The method of the invention is
CC   useful for establishing an expression system of spider drag-line silk
CC   gene in B. mori. The spider dragline silk gene product accounts for 30%
CC   of total silk proteins. This method provides a rate of transformation of
CC   about 0.5-1%. The present sequence represents a PCR primer used to
CC   amplify the silkworm spider dragline silk gene (MaSP1) sequence used in
CC   the method of the invention.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 other;

  Query Match             71.0%;  Score 14.2;  DB 25;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+03;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          2 CTCCAGCATCTGCTGCTTC 20
              |||||||  |||||||| |
Db         19 CTCCAGCTGCTGCTGCTGC 1


RESULT 13
AAZ34203
ID   AAZ34203 standard; DNA; 24 BP.
XX
AC   AAZ34203;
XX
DT   07-DEC-1999  (first entry)
XX
DE   Human PRO865 PCR reverse primer 2.
XX
KW   Human, PRO; EST; expressed sequence tag; PCR primer; hybridisation;
KW   probe; blood coagulation disorder; cancer; cellular adhesion disorder;
KW   secreted protein; transmembrane protein; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9946281-A2.
XX
PD   16-SEP-1999.
XX
PF   08-MAR-1999;   99WO-US05028.
XX
PR   10-MAR-1998;   98US-0077450.
PR   11-MAR-1998;   98US-0077632.
PR   11-MAR-1998;   98US-0077641.
PR   11-MAR-1998;   98US-0077649.
PR   12-MAR-1998;   98US-0077791.
PR   13-MAR-1998;   98US-0078004.
PR   17-MAR-1998;   98US-0040220.
PR   20-MAR-1998;   98US-0078886.
PR   20-MAR-1998;   98US-0078910.
PR   20-MAR-1998;   98US-0078936.
PR   20-MAR-1998;   98US-0078939.
PR   25-MAR-1998;   98US-0079294.
PR   26-MAR-1998;   98US-0079656.
PR   27-MAR-1998;   98US-0079663.
PR   27-MAR-1998;   98US-0079664.
PR   27-MAR-1998;   98US-0079689.
PR   27-MAR-1998;   98US-0079728.
PR   27-MAR-1998;   98US-0079786.
PR   30-MAR-1998;   98US-0079920.
PR   30-MAR-1998;   98US-0079923.
PR   31-MAR-1998;   98US-0080105.
PR   31-MAR-1998;   98US-0080107.
PR   31-MAR-1998;   98US-0080165.
PR   31-MAR-1998;   98US-0080194.
PR   01-APR-1998;   98US-0080327.
PR   01-APR-1998;   98US-0080328.
PR   01-APR-1998;   98US-0080333.
PR   01-APR-1998;   98US-0080334.
PR   08-APR-1998;   98US-0081049.
PR   08-APR-1998;   98US-0081070.
PR   08-APR-1998;   98US-0081071.
PR   09-APR-1998;   98US-0081195.
PR   09-APR-1998;   98US-0081203.
PR   09-APR-1998;   98US-0081229.
PR   15-APR-1998;   98US-0081817.
PR   15-APR-1998;   98US-0081838.
PR   15-APR-1998;   98US-0081952.
```

PR 15-APR-1998; 98US-0081955.
PR 21-APR-1998; 98US-0082568.
PR 21-APR-1998; 98US-0082569.
PR 22-APR-1998; 98US-0082700.
PR 22-APR-1998; 98US-0082704.
PR 22-APR-1998; 98US-0082804
PR 23-APR-1998; 98US-0082767.
PR 23-APR-1998; 98US-0082796.
PR 27-APR-1998; 98US-0083336.
PR 28-APR-1998; 98US-0083322.
PR 29-APR-1998; 98US-0083392.
PR 29-APR-1998; 98US-0083495.
PR 29-APR-1998; 98US-0083496.
PR 29-APR-1998; 98US-0083499.
PR 29-APR-1998; 98US-0083500.
PR 29-APR-1998; 98US-0083545.
PR 29-APR-1998; 98US-0083554.
PR 29-APR-1998; 98US-0083558.
PR 29-APR-1998; 98US-0083559.
PR 30-APR-1998; 98US-0083742.
PR 05-MAY-1998; 98US-0084366.
PR 06-MAY-1998; 98US-0084414.
PR 06-MAY-1998; 98US-0084441.
PR 07-MAY-1998; 98US-0084598.
PR 07-MAY-1998; 98US-0084600.
PR 07-MAY-1998; 98US-0084627.
PR 07-MAY-1998; 98US-0084637.
PR 07-MAY-1998; 98US-0084639.
PR 07-MAY-1998; 98US-0084640.
PR 07-MAY-1998; 98US-0084643
PR 13-MAY-1998; 98US-0085323.
PR 13-MAY-1998; 98US-0085338.
PR 13-MAY-1998; 98US-0085339.
PR 15-MAY-1998; 98US-0085573.
PR 15-MAY-1998; 98US-0085579.
PR 15-MAY-1998; 98US-0085580.
PR 15-MAY-1998; 98US-0085582.
PR 15-MAY-1998; 98US-0085689
PR 15-MAY-1998; 98US-0085697.
PR 15-MAY-1998; 98US-0085700.
PR 15-MAY-1998; 98US-0085704.
PR 18-MAY-1998; 98US-0086023.
PR 22-MAY-1998; 98US-0086392.
PR 22-MAY-1998; 98US-0086414.
PR 22-MAY-1998; 98US-0086430.
PR 22-MAY-1998; 98US-0086486.
PR 28-MAY-1998; 98US-0087098.
PR 28-MAY-1998; 98US-0087106.
PR 28-MAY-1998; 98US-0087208.
PR 30-JUL-1998; 98US-0094651.
PR 11-SEP-1998; 98US-0100038.
XX
PA (GETH) GENENTECH INC.
XX
PI Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;
XX
DR WPI; 1999-551358/46.
XX
PT New secreted and transmembrane polypeptides and their polynucleotides,
PT useful for treating blood coagulation disorders, cancers and cellular
PT adhesion disorders -
XX
PS Example 56; Page 229; 530pp; English.
XX
CC The present invention describes secreted and transmembrane polypeptides
CC and their polynucleotides. The nucleotide sequences are useful as
CC sources of probes, primers, for chromosome mapping, and for generation
CC of antisense sequences. They can also be used to create transgenic
CC animals. The proteins can be used to treat a variety of diseases and
CC disorders, depending on their function. Diseases that may be treated
CC include blood coagulation disorders, cancers and cellular adhesion
CC disorders. They may also be used to raise antibodies. AAZ33891 to
CC AAZ34338, and AAY41685 to AAY41774 represent polynucleotide and
CC polypeptide sequence given in the exemplification of the present
CC invention.
XX
SQ Sequence 24 BP; 6 A, 9 C, 4 G, 5 T, 0 other;

Query Match 71.0%; Score 14.2; DB 20; Length 24;
Best Local Similarity 84.2%; Pred. No. 8.9e+03;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CTCCAGCATCTGCTGCTTC 20
||||||||| | ||||| |
Db 6 CTCCAGCATGTACTGCTGC 24

RESULT 14
AAC78819
ID AAC78819 standard; DNA; 24 BP.
XX
AC AAC78819;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human PRO541 reverse PCR primer SEQ ID NO:367.
XX
KW Human; secreted protein; transmembrane protein; PRO, EST; cytostatic;
KW expressed sequence tag; detection; cancer; PCR primer; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200053756-A2.
XX
PD 14-SEP-2000.
XX
PF 18-FEB-2000; 2000WO-US04341.
XX
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 29-MAR-1999; 99US-0126773.
PR 21-APR-1999; 99US-0130232.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 23-JUN-1999; 99US-0141037.
PR 26-JUL-1999; 99US-0145698.
PR 29-OCT-1999; 99US-0162506.
PR 30-NOV-1999; 99WO-US28313.
PR 02-DEC-1999; 99WO-US28551.
PR 02-DEC-1999; 99WO-US28565.
PR 16-DEC-1999; 99WO-US30095.
PR 30-DEC-1999; 99WO-US31243.
PR 30-DEC-1999; 99WO-US31274.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00277.
PR 06-JAN-2000; 2000WO-US00376.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA;
PI Shelton DL, Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2000-611443/58.
XX
PT Novel PRO polypeptides and polynucleotides used in detection methods,
PT to target bioactive molecules to specific cells, and to modulate
PT cellular activities -
XX
PS Example 56; Page 286; 636pp; English.
XX
CC AAC78458 to AAC78599 represent polynucleotide and EST (expressed
CC sequence tag) sequences which encode secreted or transmembrane PRO
CC polypeptides. The PRO polynucleotides and polypeptides have cytostatic

```
CC   activity. The polynucleotides and polypeptides can be used for detecting
CC   the presence of PRO polypeptides in samples, for linking bioactive
CC   molecules to cells and for modulating biological activities of cells,
CC   using the polypeptides for specific targeting. The polypeptide targeting
CC   can be used to kill the target cells, e.g. for the treatment of cancers.
CC   The polypeptide pairs provide specific targeting of bioactive molecules
CC   to cells. AAC78600 to AAC78987 represent PCR primers and probes used in
CC   the isolation of the PRO polynucleotide sequences.
XX
SQ   Sequence 24 BP, 6 A, 9 C, 4 G, 5 T, 0 other;

  Query Match             71.0%;  Score 14.2;  DB 21;  Length 24;
  Best Local Similarity   84.2%;  Pred. No. 8.9e+03;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          2 CTCCAGCATCTGCTGCTTC 20
              ||||||||| | ||||| |
Db          6 CTCCAGCATGTACTGCTGC 24


RESULT 15
ABX92575
ID   ABX92575 standard; DNA; 24 BP.
XX
AC   ABX92575;
XX
DT   08-MAY-2003  (first entry)
XX
DE   Human PRO DNA PCR primer SEQ ID No 367.
XX
KW   Human; PRO polypeptide; secreted and transmembrane protein;
KW   immune disorder; diabetes; hyper-insulinaemia; hypo-insulinaemia;
KW   cardiac insufficiency; nervous system disorder; kidney disorder;
KW   bone disorder; cartilage disorder; arthritis; tumour; wound healing;
KW   genetic disorder; cytostatic; antidiabetic; antiinflammatory;
KW   antiarthritic; anti-tumour; vulnerary; antianaemic; dermatological;
KW   cardiant; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002169284-A1.
XX
PD   14-NOV-2002.
XX
PF   16-OCT-2001; 2001US-0978697.
XX
PR   07-OCT-1998;   98WO-US21141.
PR   20-NOV-1998;   98WO-US24855.
PR   05-JAN-1999;   99WO-US00106.
PR   08-MAR-1999;   99WO-US05028.
PR   10-MAR-1999;   99WO-US05190
PR   14-MAY-1999;   99WO-US10733.
PR   02-JUN-1999;   99WO-US12252
PR   30-NOV-1999;   99WO-US28313
PR   02-DEC-1999;   99WO-US28551.
PR   02-DEC-1999;   99WO-US28565.
PR   16-DEC-1999;   99WO-US30095.
PR   30-DEC-1999;   99WO-US31243.
PR   30-DEC-1999;   99WO-US31274.
PR   05-JAN-2000; 2000WO-US00219.
PR   06-JAN-2000; 2000WO-US00277.
PR   06-JAN-2000; 2000WO-US00376.
PR   11-FEB-2000; 2000WO-US03565.
PR   18-FEB-2000; 2000WO-US04341.
PR   24-FEB-2000; 2000WO-US05004.
PR   02-MAR-2000; 2000WO-US05841.
PR   10-MAR-2000; 2000WO-US06319.
PR   21-MAR-2000; 2000WO-US07532.
PR   30-MAR-2000; 2000WO-US08439.
PR   17-MAY-2000; 2000WO-US13705.
PR   22-MAY-2000; 2000WO-US14042.
PR   30-MAY-2000; 2000WO-US14941.
PR   02-JUN-2000; 2000WO-US15264.
PR   28-JUL-2000; 2000WO-US20710.
PR   24-AUG-2000; 2000WO-US23328.
PR   01-DEC-2000; 2000WO-US32678.
PR   20-DEC-2000; 2000WO-US34956.
PR   28-FEB-2001; 2001WO-US06520.
PR   22-MAR-2001; 2001WO-US09552.
PR   25-MAY-2001; 2001WO-US17092.
PR   01-JUN-2001; 2001WO-US17800.
PR   20-JUN-2001; 2001WO-US19692.
PR   29-JUN-2001; 2001WO-US21066.
PR   09-JUL-2001; 2001WO-US21735.
PR   17-OCT-1997;   97US-062250P.
PR   03-NOV-1997;   97US-064249P.
PR   13-NOV-1997;   97US-065311P.
PR   21-NOV-1997;   97US-066364P.
PR   10-MAR-1998;   98US-077450P.
PR   11-MAR-1998;   98US-077632P.
PR   11-MAR-1998;   98US-077641P.
PR   11-MAR-1998;   98US-077649P.
PR   12-MAR-1998;   98US-077791P.
PR   13-MAR-1998;   98US-078004P.
PR   20-MAR-1998;   98US-078886P.
PR   20-MAR-1998;   98US-078910P.
PR   20-MAR-1998;   98US-078936P.
PR   20-MAR-1998;   98US-078939P.
PR   25-MAR-1998;   98US-079294P.
PR   26-MAR-1998;   98US-079656P.
PR   27-MAR-1998;   98US-079663P.
PR   27-MAR-1998;   98US-079664P.
PR   27-MAR-1998;   98US-079689P.
PR   27-MAR-1998;   98US-079728P.
PR   27-MAR-1998;   98US-079786P.
PR   30-MAR-1998;   98US-079920P.
PR   30-MAR-1998;   98US-079923P.
PR   26-MAY-1981;   81US-0267213.
PR   17-MAR-1998;   98US-0040220.
PR   26-JUN-1998;   98US-0105413.
PR   07-OCT-1998;   98US-0168978.
PR   02-NOV-1998;   98US-0184216.
PR   06-NOV-1998;   98US-0187368.
PR   07-DEC-1998;   98US-0202054.
PR   22-DEC-1998;   98US-0218517.
PR   05-MAR-1999;   99US-0254465.
PR   10-MAR-1999;   99US-0265686.
PR   12-APR-1999;   99US-0284291.
PR   14-MAY-1999;   99US-0311832.
PR   14-MAY-1999;   99US-0380137.
PR   25-AUG-1999;   99US-0380138.
PR   25-AUG-1999;   99US-0380142.
PR   08-NOV-2000; 2000US-0709238.
PR   27-NOV-2000; 2000US-0723749.
PR   20-DEC-2000; 2000US-0747259
PR   22-MAR-2001; 2001US-0816744.
PR   22-MAR-2001; 2001US-0816920.
PR   10-MAY-2001; 2001US-0854208.
PR   10-MAY-2001; 2001US-0854280.
PR   01-JUN-2001; 2001US-0872035.
PR   05-JUN-2001; 2001US-0874503.
PR   14-JUN-2001; 2001US-0882636.
PR   19-JUN-2001; 2001US-0886342.
PR   30-JUL-2001; 2001US-0918585.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Baker KP,  Botstein D,  Desnoyers L,  Eaton D;
PI   Ferrara N,  Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA;
PI   Shelton DL,  Stewart TA,  Tumas D,  Williams PM,  Wood WI;
XX
DR   WPI; 2003-288163/28.
XX
PT   Novel secreted and transmembrane polypeptides and polynucleotides
```

PT encoding them useful for treating cancer, kidney diseases, bone,
PT cartilage disorders and immune deficiencies -
XX
PS Example 56; Page 158; 459pp; English.
XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The
CC PRO polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides are useful for detecting other PRO polypeptides, for
CC linking bioactive molecules to cells expressing PRO polypeptides,
CC for modulating biological activities of cells expressing PRO
CC polypeptides, and for for identifying agonists or antagonists. The
CC bioactive molecule maybe a toxin, radiolabel or antibody, and causes
CC apoptosis or death of the cell. The PRO polypeptides are useful for
CC treating immune disorders, diabetes or hyper- or hypo-insulinaemia,
CC cardiac insufficiency, nervous system disorders, kidney disorders,
CC bone and cartilage disorders or arthritis, tumours, and wound healing.
CC The polynucleotide sequences encoding PRO polypeptides are useful as
CC hybridisation probes, in chromosome and gene mapping, in the generation
CC of antisense RNA and DNA, in the preparation of PRO polypeptides, for
CC generating transgenic animals or knockout animals, for the genetic
CC analysis of individuals with genetic disorders, and in gene therapy.
CC The present sequence represents a PCR primer used in the examples
CC of the present invention.
CC Note: The sequence data for this patent was obtained in electronic
CC format directly from the USPTO web site at
CC seqdata.uspto.gov/psipsDIDEntry.html.
XX
SQ Sequence 24 BP, 6 A, 9 C, 4 G, 5 T; 0 other;

Query Match 71.0%; Score 14.2; DB 25, Length 24,
Best Local Similarity 84.2%; Pred. No. 8.9e+03;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 CTCCAGCATCTGCTGCTTC 20
||||||||| | ||||| |
Db 6 CTCCAGCATGTACTGCTGC 24

Search completed: August 19, 2003, 20:22:06
Job time : 248 secs